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## Orange County Sanitation District

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March 1, 2018

Dr. Keith Maruya  
Southern California Coastal Water Research Project Authority  
SCCWRP  
3535 Harbor Blvd. Suite 110  
Costa Mesa, CA 92626

(submitting via email – [Keithm@sccwrp.org](mailto:Keithm@sccwrp.org))

Dear Dr. Maruya,

Orange County Sanitation District (OCSD) has been a long-standing partner with SCCWRP, and we value this relationship. Thank you for the opportunity to review and provide comments on the draft *Monitoring Strategies for Constituents of Emerging Concern (CECs) in Recycled Water* report. We are pleased to see the Science Panel return with an expanded scope and applaud the efforts in updating the risk based framework, CEC monitoring recommendations for all non-potable recycled water uses, the needed evaluation and status of antibiotic resistance research related to recycled water, and the discussion for data collection and the need for trends analysis over time.

### General Support of the Overall Effort and Intent of the Draft Report

OCSD supports a phased, performance-based approach for implementing the CEC monitoring programs and a multi-tiered framework for interpreting the resulting data. This framework allows for a flexible, adaptable response to increase or decrease in monitoring requirements, and it provides cost-effective means for incremental data gathering. This well-developed process allows for removal of CECs previously recommended that demonstrate no need for continued monitoring while allowing the addition of new compounds that need to be investigated for further understanding. We appreciate that the Panel recognizes the need to prioritize time, cost, and staff resources into monitoring efforts for public health, and it has developed a framework that is feasible, responsible, and ensures a meaningful process. We are also in agreement with the CEC compounds that were added and removed in this updated draft report. The Panel had sound rationale for the decisions that were made, and we recommend that this process be continued moving forward.

**Our Mission:** To protect public health and the environment by providing effective wastewater collection, treatment, and recycling.



## Comments on Bioassays and Data Collection/Analysis

OCSD understands the rationale for the proposed use of bioassay tools as a preliminary warning indicator test to help better understand the presence of unknown CECs in recycled water. The Science Panel was clear in their belief that the methods are standardized and available and that these are good tools to use now. We respect that this may be true in academic settings in some areas, however, in the wastewater and drinking water community here in California this is not the case. These are not standardized tests and methods that are used typically in water and wastewater agencies or regularly performed by agency and laboratory staff. We ask that you consider the need for laboratories and staff to prepare for these tests by having time to procure equipment and supplies, and demonstrating competency with the method. The wastewater, recycled water and drinking water communities pride themselves on taking a proactive and responsible approach to conducting business and protecting human health. To ensure quality data is achieved, intercalibration exercises between agencies and laboratories should be completed. OCSD would like to suggest a compromise approach where bioassays would be voluntary for a specific time to allow agencies and staff to prepare. The State Board uses this approach when issuing new permits, and it is very effective. Additionally, the State may also not be ready to receive voluminous amounts of bioassay data. By starting with a voluntary approach, it will allow the State time to organize itself to build a system to receive this data stream.

Likely the State does not currently have the funding, staff, time, or resources to immediately implement the data portal program recommended by the Panel. We suggest that during an initial voluntary bioassay data collection time frame, that SCCWRP be hired to help organize a technical group of volunteers from academia, wastewater, drinking water, and regulatory agencies to initially go through the voluntary data and assess the results and feasibility of data collection, as well as, standardize formats and data submissions. This trial period would give everyone time to build a database system, understand the process and work out the challenges before appropriate permittees state-wide are participating. Everyone in this process needs time to prepare and test the new system. This voluntary committee, organized by SCCWRP, can also make recommendations on listing and delisting of CECs at the next Panel review. OCSD supports strongly the need of a well-balanced stakeholder advisory committee to review standards, methods, and data over time. This advisory team structure should report directly to the Science Panel every three years. The independent Science Review Panel should make the final needed recommendations to the State for updating the CEC program and compounds list.



OCSO also supports our fellow agencies in warning the Science Panel about implementing trigger levels for the bioassay tests. The Panel repeatedly states that this report is not meant to have regulatory or compliance implications. Unfortunately, the truth of the matter is that numbers are picked up from reports like these and used for regulatory purposes. We encourage the Panel and SCCWRP to be proactively responsible and refrain from publishing trigger levels that may later be used inappropriately. The bioassay portion is a new proposed aspect of the program, and adding trigger levels is premature and a disservice to the program. Rather than discourage data collection by adding trigger levels, OCSO recommends removing triggers and promoting voluntary bioassay research that would ultimately move this program forward in the way that we think the Panel intended.

## Antibiotic Resistant Genes and Bacteria

We are encouraged by Section 8 of the final draft report that summarizes previous studies that look at the occurrence of antibiotic resistance in different matrices and applications. The conclusion from the panel members is that "given the uncertainty in this field of investigation it appears that additional research is needed to understand and apply the results of the work."

OCSO is participating in a cooperative effort with SCCWRP, LA City Sanitation, and LACSD to characterize antibiotic resistant bacteria and genes in wastewater influent and effluent and to look at the effect of different wastewater treatment processes on antibiotic resistant bacteria and genes (e.g. secondary vs. tertiary). OCSO supports research to evaluate potential public health and environmental risks, especially when there is a lack of available information. The study design will support the Panel's recommendation in moving this field of study forward.



## Conclusion

OCSD is an integral partner in water recycling with Orange County Water District (OCWD). We apply our full support of their submitted comments on the draft report.

In particular, the need to double check all the published numbers for all compounds in all figures, the support to keep the permitting authority with the Regional Boards, and the use of updated terms when discussing recycled water. OCWD has done an excellent job of fully editing the report and providing a valuable QA/QC effort that should be incorporated when finalizing the report.

OCSD is an actively engaged partner with SCCWRP on many projects including CECs. We look forward to continuing to help move the CEC program forward in line with the Panel's recommendations. For questions regarding this letter, please contact Lisa Haney at (714) 593-7404.

A handwritten signature in black ink, appearing to read "James E. Colston", written over a horizontal line.

James E. Colston  
Director of Environmental Services

JC:lf  
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